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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,783	08/07/2001	Young Ho Park	HI-0037	8871
34610	7590	04/04/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			ELAHEE, MD S	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/922,783	PARK, YOUNG HO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Md S Elahee	2645	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is responsive to an amendment filed on 10/27/04. Claims 1-23 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-14 and 20 have been fully considered but are moot in view of the new ground(s) of rejection which is deemed appropriate to address all of the needs at this time.

Applicant's arguments with respect to claims 15-19 have been fully considered but they are not persuasive.

Regarding claim 15, the applicant argues on page 13, lines 10-12 that as discussed above, Holshouser fails to disclose or suggest a method of opening a flip cover on a mobile telephone which includes holding a flip cover in a closed position with an elastic member. The examiner disagrees with this argument. The applicant didn't claim that elastic member urges the flip cover to hold in a closed position as he discussed regarding claim 1. Thus the rejection of the claim in view of Holshouser will remain.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2645

4. Claims 15-19 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Holshouser et al. (U.S. Patent No. 6,151,486).

Regarding claim 15, Holshouser teaches rotatably attaching a flip cover to a telephone body with a hinge (fig.1A, 1B; col.4, lines 17-22).

Holshouser further teaches holding the flip cover in a closed position with a spring (i.e., elastic) member bearing on the hinge (fig. 3A, 3B; col.5, lines 15-23).

Holshouser further teaches urging the flip cover into an open position when the flip cover is rotated past a certain angle (fig. 3A, 3B; col.5, lines 15-23).

Holshouser further teaches rotating the flip cover from the closed position past the certain angle by energizing an electromagnet (fig.3A, 9; col.8, lines 43-67).

Regarding claim 16, Holshouser teaches that the urging the flip cover into an open position comprises applying a force on the flip cover with the elastic member (fig.3A, 6B, 9; col.5, lines 15-23, col.6, lines 38-45, col.8, lines 43-67).

Regarding claim 18, Holshouser teaches energizing an electromagnet comprises simultaneously activating a mobile telephone (fig.8, 9; col.8, lines 8-18, 43-67).

Regarding claim 19, Holshouser teaches rotating the flip cover from the closed position comprises applying a magnetic force upon a permanent magnet disposed upon the flip cover (fig.6C; col.6, lines 46-53).

Regarding claim 22, Holshouser teaches a telephone body with a keypad (fig.1A, 1B, element 16; col.4, lines 17-23).

Holshouser further teaches a flip cover elastically rotatably attached to the telephone body and configured to cover the keypad in a closed position, and expose the keypad in an open position (fig. 3A, 3B; col.5, lines 14-23).

Holshouser further teaches one magnetic object 92 [i.e., electromagnet] disposed on one of the telephone body and the flip cover (fig. 3A, 9; col.8, lines 43-67). (Note: magnetic object of bottom housing is being encircled by conductive coil which produces a magnetic field when electric current flows through it, therefore, the magnetic object 92 is working as electromagnet)

Holshouser further teaches at least one permanent magnet disposed on the other of the telephone body and the flip cover, wherein the permanent magnet is configured to be opposed [i.e., repelled] by the electromagnet when the electromagnet is energized (fig.3A, 9; col.8, lines 43-67).

Holshouser further teaches a switch configured to simultaneously activate the telephone and energize the electromagnet, wherein a repulsion force between the at least one electromagnet and the at least one permanent magnet facilitates opening of the flip cover (fig.3A, 9; col.8, lines 60-65).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2645

6. Claims 1-6, 8-10, 12, 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art and in view of Holshouser et al. (U.S. Patent No. 6,151,486).

Regarding claims 1 and 23, Applicant's admitted prior art teaches a telephone body provided with a keypad (fig.1, element 101).

Applicant's admitted prior art further teaches a hinge shaft provided at an end of the telephone body (fig.1, element 102).

Applicant's admitted prior art further teaches a spring disposed within the telephone body and configured to elastically support the hinge (page 1, paragraph 4).

Applicant's admitted prior art further teaches a flip cover hingedly connected to the telephone body via the hinge shaft, wherein the flip cover is configured to pivot on the hinge shaft, thereby exposing the keypad and wherein the spring urges the flip cover into a closed position where the flip cover covers the keypad (fig.1, 2; pages 1, 2, paragraphs 4-6).

However, Applicant's admitted prior art does not specifically teach 'at least one electromagnet provided at one side of the telephone body and configured to apply an electromagnetic force toward the flip cover which urges the flip cover towards an open position'. Holshouser further teaches at least one magnetic object 92 [i.e., electromagnet] provided at one side of the telephone body and configured to apply an electromagnetic force toward the flip cover which urges the flip cover towards an open position (abstract; fig.3A, 9; col.8, lines 43-67) (Note: magnetic object of bottom housing is being encircled by conductive coil which produces a magnetic field when electric current flows through it, therefore, the magnetic object 92 is working as electromagnet). Thus, it would have been obvious to one of ordinary skill in the art at

Art Unit: 2645

the time the invention was made to modify Applicant's admitted prior art to incorporate at least one electromagnet provided at one side of the telephone body and configured to apply an electromagnetic force toward the flip cover which urges the flip cover towards an open position as taught by Holshouser. The motivation for the modification is to have doing so in order to reduce the inconvenience of opening up a flip cover.

Applicant's admitted prior art further does not specifically teach 'at least one permanent magnet provided at one side of the flip cover and proximate to the electromagnet when the flip cover is in the closed position'. Holshouser teaches at least one permanent magnet provided at one side of the flip cover and proximate to the electromagnet when the flip cover is in the closed position (abstract; fig.3A, 9; col.8, lines 60-67). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art to incorporate at least one permanent magnet provided at one side of the flip cover and proximate to the electromagnet when the flip cover is in the closed position as taught by Holshouser. The motivation for the modification is to have doing so in order to reduce the inconvenience of closing up a flip cover.

Regarding claims 2 and 3, Applicant's admitted prior art further does not specifically teach that the electromagnet and the permanent magnet are configured to repel one another when the electromagnet is energized and a switch configured to momentarily energize the electromagnet when the mobile telephone is activated. Holshouser teaches that the electromagnet and the permanent magnet are configured to oppose [i.e., repel] one another when the electromagnet is energized (fig.3A, 9; col.8, lines 43-67) and a switch configured to momentarily energize the electromagnet when the mobile telephone is activated (fig.8; col.8, lines 8-18).

Art Unit: 2645

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art to incorporate the electromagnet and the permanent magnet are configured to repel one another when the electromagnet is energized and a switch configured to momentarily energize the electromagnet when the mobile telephone is activated as taught by Holshouser. The motivation for the modification is to have doing so in order to overcome the attractive force between the permanent magnet and the magnetic object so that the flip cover will be opened up easily.

Regarding claims 4 and 10, Applicant's admitted prior art further does not specifically teach wherein the at least one electromagnet comprises a plurality of electromagnets disposed on the telephone body, and wherein the at least one permanent magnet comprises a corresponding plurality of permanent magnets disposed on the flip cover, wherein each permanent magnet is located on the flip cover adjacent to a respective electromagnet when the flip cover is in a closed position. Holshouser teaches wherein the at least one electromagnet comprises a plurality of electromagnets disposed on the telephone body, and wherein the at least one permanent magnet comprises a corresponding plurality of permanent magnets disposed on the flip cover, wherein each permanent magnet is located on the flip cover adjacent to a respective electromagnet when the flip cover is in a closed position (fig.7, 9; col.7, lines 14-21, col.8, lines 43-67). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art to incorporate wherein the at least one electromagnet comprises a plurality of electromagnets disposed on the telephone body, and wherein the at least one permanent magnet comprises a corresponding plurality of permanent magnets disposed on the flip cover, wherein each permanent magnet is located on the flip cover adjacent to a



Art Unit: 2645

respective electromagnet when the flip cover is in a closed position as taught by Holshouser. The motivation for the modification is to have doing so in order to create attractive force between the permanent magnets and the magnetic objects so that the flip cover remain closed up without any inconvenience.

Regarding claims 5, 12 and 17, Applicant's admitted prior art further does not specifically teach a switch configured to momentarily energize the plurality of electromagnets when the mobile telephone is activated. Holshouser teaches a switch configured to momentarily energize the plurality of electromagnets when the mobile telephone is activated (fig.7-9; col.7, lines 14-21, col.8, lines 43-67). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art to incorporate a switch configured to momentarily energize the plurality of electromagnets when the mobile telephone is activated as taught by Holshouser. The motivation for the modification is to have doing so in order to overcome the attractive force between the permanent magnet and the magnetic object so that the flip cover will be opened up without any inconvenience.

Regarding claims 6 and 13, Applicant's admitted prior art teaches that the spring is a leaf spring (page 2, paragraph 5).

Regarding claim 8 is rejected for the same reasons as discussed above with respect to claims 1-3. Furthermore, Applicant's admitted prior art teaches a spring [i.e., elastic] member configured to bear on the hinge shaft, wherein the spring member urges the flip cover to the closed position when the flip cover forms less than a predetermined angle with respect to the body, and wherein the spring member urges the flip cover to an open position when the flip cover is rotated past the certain [i.e., predetermined] angle (fig. 2; page 2, paragraph 6).

Art Unit: 2645

Regarding claim 9, Applicant's admitted prior art further does not specifically teach the electromagnet and the permanent magnet cooperating to push the flip cover past the predetermined angle when the electromagnet is energized. Holshouser teaches that the electromagnet and the permanent magnet cooperate to push the flip cover past the predetermined angle when the electromagnet is energized (fig.3A, 9; col.8, lines 43-67). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art to incorporate the electromagnet and the permanent magnet cooperating to push the flip cover past the predetermined angle when the electromagnet is energized as taught by Holshouser. The motivation for the modification is to have doing so in order to open up the flip cover without any inconvenience.

Regarding claim 20 is rejected for the same reasons as discussed above with respect to claims 1-3 and 15.

Regarding claim 21 is rejected for the same reasons as discussed above with respect to claim 15.

7. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art and in view of Holshouser et al. (U.S. Patent No. 6,151,486) and further in view of Go (U.S. Patent No. 6,091,938).

Regarding claims 7 and 14, Applicant's admitted prior art in view of Holshouser fails to teach "said spring is a coil spring". Go teaches that the spring is a coil spring (col.3, lines 3-9). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art in view of Holshouser to incorporate the spring

Art Unit: 2645

being a coil spring as taught by Go. The motivation for the modification is to have doing so in order to engage the projection with the depressed part of the cam hinge.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art and in view of Holshouser et al. (U.S. Patent No. 6,151,486) and further in view of Metroka et al. (U.S. Patent No. 6,091,938).

Regarding claim 11, Applicant's admitted prior art in view of Holshouser fails to teach "a momentary switch". Metroka teaches a momentary switch (col.3, lines 55-57). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Applicant's admitted prior art in view of Holshouser to incorporate a momentary switch as taught by Metroka. The motivation for the modification is to have doing so in order to accomplish the on/off power.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2645

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

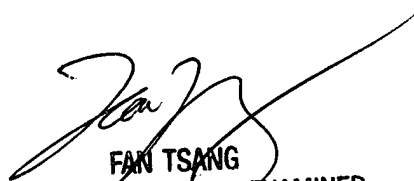
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Md S Elahee whose telephone number is (571) 272-7536. The examiner can normally be reached on Mon to Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.E.

MD SHAFIUL ALAM ELAHEE  
March 29, 2005

  
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